

Nuclear Fuels Reprocessing Coalition

Statement

of

Norris McDonald

Co-Chairman

Nuclear Fuels Reprocessing Coalition

Before the

Blue Ribbon Commission on America's Nuclear Future

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Washington, D.C.

Introduction

My name is Norris McDonald and I am the Co-Chairman of the Nuclear Fuels Reprocessing Coalition (NFRC). The NFRC is promoting the establishment of a Nuclear Waste Management Agency (NWMA) to manage all federal and civilian spent nuclear fuel and high-level radioactive waste management programs currently under the control of the United States Department of Energy (DOE). The NFRC is recommending an amendment to the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101) to establish the United States Nuclear Waste Management Agency. We request that the Blue Ribbon Commission on America's Nuclear Future adopt the legislation we have drafted transferring nuclear waste management as a recommendation to Congress and President Barack Obama.

The Nuclear Waste Management Act of 2010 (NWM Act), in addition to transferring authority for managing nuclear waste from DOE to the NWMA, establishes and operates receipt of low-level radioactive waste, provides for supplementary segregation, provides for treatment and provides for burial or monitored/retrievable storage facilities on a fee basis. The NWM Act would establish spent nuclear fuel reprocessing as a viable technology to aid in achieving and maintaining our national security and national energy policy goals.

The NFRC was established in 2002 by Clinton Crackel and me to promote the construction and operation of nuclear reprocessing facilities. NFRC promotes reprocessing commercial spent nuclear fuel that is generated by commercial nuclear power plants. Reprocessing dramatically reduces the amount of high-level radioactive waste that would have to be stored in a geologic repository. We also support reprocessing plutonium and highly enriched uranium from nuclear warheads into fuel for use in commercial nuclear power plants. Members of the NFRC include the Center for Environment, Commerce & Energy, Heartland Institute and Mark Lewis. We are committed to implementing a viable solution to managing our nation's nuclear waste.

We also believe that Yucca Mountain is the logical and scientifically acceptable site for storing and reprocessing of spent nuclear fuel.

Summary of Findings

The Nuclear Waste Management Act of 2010 was drafted by NFRC and is attached. A summary of our findings include:

1. The United States Department of Energy (hereafter referred to as the DOE) has failed to provide suitable off-site commercial spent nuclear fuel (hereafter referred to as SNF) disposal to the commercial nuclear utilities per the Nuclear Waste Policy Amendments Act.
2. Civilian low-level radioactive waste disposal has been inadequately addressed.
3. Commercial SNF reprocessing is an acceptable, practical means of fulfilling the nuclear fuel needs, while concurrently reducing the need for geologic repository space.
4. Numerous Government Accountability Office reports have proven the DOE continues to lack effective program management, and many key projects managed by the DOE experience cost overruns and are not completed by the projected dates.
5. A financially autonomous, federal corporation model would be ideally suited to effectively manage our nation's SNF, high-level radioactive waste, and low-level radioactive waste.

General Provisions of NWMA Act

Other general provisions of our legislation include:

- United States Nuclear Waste Management Agency will be governed by a Board of Governors.
- An Executive Director shall be responsible for the overall operation of the day-to-day activities of the NMWA.
- The Secretary of Energy shall ensure the completion of the transfer to the NWMA the control of the Yucca Mountain Project, the Waste Isolation Pilot Plant (hereafter referred

to as WIPP), and any other DOE owned facilities deemed necessary by the Executive Director to enable the NWMA to fulfill its congressionally mandated activities.

- The Secretary of Energy shall transfer to the NWMA all existing contracts, and all pertinent funds previously budgeted, to support the projects and facilities that are transferred to the NWMA.
- Congress shall exercise greater flexibility in the disbursement of the Nuclear Waste Fund (NWF) to enable the NWMA to meet projected completion dates on projects intended to be funded by the NWF.
- Congress shall authorize the NWMA to establish and collect fees for providing low-level radioactive waste receipt.
- Congress shall authorize the NWMA to construct an interim, centralized SNF storage facility on or near the Yucca Mountain Geologic Repository site.
- Congress shall authorize the NWMA, upon transfer of the WIPP site, to commence the licensing activities for commercial low-level radioactive waste receipt.
- With the acknowledgement by Congress that SNF is in effect a renewable energy source, Congress shall authorize the NWMA to pursue the study of SNF reprocessing for the purposes of significantly reducing the total volume of radioactive waste to be stored in the Yucca Mountain Geologic Repository.
- Congress shall allocate annual funds from sources other than the NWF to be used by the NWMA to develop the safest, most cost effective method(s) of reprocessing SNF to meet desired proliferation-resistant standards.
- Congress shall also authorize the NWMA to negotiate with commercial suppliers of nuclear fuel to incorporate proliferation-resistant SNF reprocessing into their nuclear fuel manufacturing process.

Conclusion

The NFRC is promoting the establishment of a Nuclear Waste Management Agency (NWMA) to manage all federal and civilian spent nuclear fuel and high-level radioactive waste management programs currently under the control of the United States Department of Energy (DOE). We hope the Blue Ribbon Commission on

America's Nuclear Future will adopt our proposal and recommend it to Congress and President Barack Obama.

Attachment A

Nuclear Waste Management Agency Act of 2010 (Introduced in Senate/House)

S./H.R. _____

111th CONGRESS

2nd Session

S./H.R. _____

To amend the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101) to establish the United States Nuclear Waste Management Agency to manage all Federal and civilian spent nuclear fuel and high-level radioactive waste management programs currently under the control of the United States Department of Energy; to establish and operate low-level radioactive waste receipt, supplementary segregation, treatment and burial or monitored/retrievable storage facilities on a fee basis; and to promote spent nuclear fuel reprocessing as a viable technology to aid in achieving and maintaining our national security and National Energy Policy goals, and for its potential to significantly reduce the total volume of radioactive waste designated for disposal in a Federal geologic repository.

IN THE SENATE OF THE UNITED STATES

June__ (legislative day, JUNE__), 2010

Mr./Ms. _____ introduced the following bill; which was read twice and referred to the
Committee on Energy and Natural Resources

A BILL

To amend the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101) to establish the United States Nuclear Waste Management Agency to manage all Federal and civilian spent nuclear fuel and high-level radioactive waste management programs currently under the control of the United States Department of Energy; to establish and operate low-level radioactive waste receipt, supplementary segregation, treatment and burial or monitored/retrievable storage facilities on a fee basis; and to promote spent nuclear fuel reprocessing as a viable technology to aid in achieving and maintaining our national security and National Energy Policy goals, and for its potential to significantly reduce the total volume of radioactive waste designated for disposal in a Federal geologic repository.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled.

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE- This Act may be cited as the Nuclear Waste Management Agency Act of 2010.

(b) TABLE OF CONTENTS- The table of contents of this Act is as follows:

Sec. 1. Short title; table of contents.

Sec. 2. Findings.

Sec. 3. Definitions.

Sec. 4. Purposes and Policies.

SECTION 2. FINDINGS.

The Congress finds that—

1. The United States Department of Energy (hereafter referred to as the DOE) has failed to provide suitable off-site commercial spent nuclear fuel (hereafter referred to as SNF) disposal to the commercial nuclear utilities per the Nuclear Waste Policy Amendments Act of 1987; yet to date, nearly \$30 billion dollars (including interest) has been paid into the Nuclear Waste Fund by the electric utility ratepayers, and the

projected date for completion of the geologic repository by the DOE to begin emplacement of SNF has recently been revised from 2010 to a new projected date of 2017, while the original Congressionally mandated date for having a geologic repository available was 1998.

2. The DOE has not addressed the issue of civilian low-level radioactive waste disposal despite the fact that the Low-Level Radioactive Waste Policy Act of 1980, as amended in 1985, has not lived up to the original expectations of the legislation due to the continuing inability of the various low-level radioactive waste compacts to develop low-level radioactive waste disposal facilities for use by members of the respective compacts, nor is it the DOE's responsibility to do so under existing legislation.
3. Commercial SNF reprocessing is an acceptable, practical means of fulfilling the nuclear fuel needs, while concurrently reducing the need for geologic repository space, and is being utilized in other industrialized nations that rely to a great degree on nuclear power for their electricity. Despite this fact, reprocessing efforts in the U.S. were banned in the 1970's out of nuclear non-proliferation policy concerns. Nonetheless, the U.S. accepts and condones commercial SNF reprocessing in such countries as France, India, Japan, Russia and the United Kingdom. Further, SNF reprocessing can aid in reducing the availability of weapons-grade plutonium by creating mixed-oxide (MOX) fuel, containing plutonium-239, for peaceful uses in nuclear power reactors.
4. Numerous Government Accountability Office reports have proven the DOE continues to lack effective program management, and many key projects managed by the DOE experience cost overruns and are not completed by the projected dates. The inability of the DOE to provide SNF disposal services to our commercial nuclear power plants in a timely manner is causing additional, undue financial hardships on our nuclear utilities due to the need to license and construct on-site dry storage cask facilities and/or purchase additional dry storage casks to support prolonged on-site storage of SNF. The following are three examples of the additional costs presently borne, or anticipated to be borne, by the Federal Government due to the DOE's inability to provide services to the nuclear power industry in a timely manner:
 - a. The DOE recently settled a lawsuit by the Exelon Corporation, the nation's largest nuclear power plant operator, for \$80 million in past costs for SNF storage. If Yucca Mountain stays closed, Exelon will get \$300 million through 2010 and \$600 million through 2015, after which the cost to keep SNF on-site would escalate;

- b. The U.S. Federal Claims Court recently awarded nearly \$150 million in damages to three Northeast utilities that sued the Federal Government for the DOE's failure to provide timely SNF disposal services; and
 - c. To date, 65 lawsuits have been filed against the DOE pertaining to the SNF issue, with the total potential Federal Government liability for the prolonged storing of SNF at nuclear power plant sites estimated at over \$60 billion.
5. A financially autonomous, Federal corporation model would be ideally suited to effectively manage our nation's SNF, high-level radioactive waste, and low-level radioactive waste. Such a model was proposed by the Nuclear Waste Strategy Coalition in its analysis publication entitled Redesigning the U.S. High Level Nuclear Waste Disposal Program For Effective Management, January 1995. Such a model is also similar to the Independent Federal Authority discussed by the DOE's Office of Civilian Radioactive Waste Management in its publication entitled Alternative Means of Financing and Managing the Civilian Radioactive Waste Management Program (DOE/RW-0546), August 2001. Also, a Federal corporation model would be ideally suited to providing the full array of radioactive waste management services to government and industry because it would be the most capable of the models for accurately assessing and meeting demands for service from a broad base of customers due to its business acumen, it would be accountable to outside regulators, and it would emphasize efficiency in all facets of operation.

SECTION 3. DEFINITIONS.

For the purposes of this Act:

- 1. The term 'contract holder' means a party to a contract with the Executive Director of the United States Nuclear Waste Management Agency for the disposal of spent nuclear fuel or high-level radioactive waste entered into pursuant to section 302(a) of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10222(a)), as amended by this Act; and
- 2. The terms 'Secretary', 'Administrator', 'civilian nuclear power reactor', 'Commission', 'Department', 'disposal', 'high-level radioactive waste', 'Indian tribe', 'repository', 'reservation', 'spent nuclear fuel', 'State', 'storage', 'Waste Fund', and 'Yucca Mountain site' shall have the meanings given such terms in section 2 of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101), as amended by this Act.
- 3. As previously stated in this legislation the United States Department of Energy is referred to as the DOE, and OCRWM stands for the DOE's Office of Civilian Radioactive Waste Management.

SECTION 4. PURPOSES AND POLICIES.

TITLE 1 -- UNITED STATES NUCLEAR WASTE MANAGEMENT AGENCY

TITLE 2 -- SUPPORT FOR SPENT NUCLEAR FUEL REPROCESSING

TITLE I—UNITED STATES NUCLEAR WASTE MANAGEMENT AGENCY

SEC. 101. GENERAL PROVISIONS AND PROGRAM SCHEDULES.

(a) IN GENERAL- Congress shall approve the creation of an autonomous federal agency, established as a Federal corporation, to manage the Federal SNF and high-level radioactive waste repository and low-level radioactive waste management programs currently under the control of the DOE, and to license, construct and operate civilian low-level radioactive waste receipt, supplementary segregation, treatment and burial or monitored/retrievable storage facilities on a fee basis. This agency shall be called the United States Nuclear Waste Management Agency (hereafter referred to as the NWMA). The agency shall be governed by a Board of Governors, hereafter referred to as the Board, comprised of members selected from and representing the following organizations: DOE (1 member), Nuclear Energy Institute (1 member), National Association of Regulatory Utility Commissioners (1 member), United States Department of the Interior (1 member), American Nuclear Society (1 member), Health Physics Society (1 member), National Governors Association (1 member), National Association of State Energy Officials (1 member), Center for Environment, Commerce & Energy (1 member), and National Congress of American Indians (1 member). Each Governor shall be appointed by the President to serve for a period of four years. The Board, in turn, shall select, with Senate concurrence, an individual not serving as a member of the Board to serve as the Agency's chief executive officer and board chair, with the term of service to be at the pleasure of the Board. The full title of this position shall be the Executive Director and Chairman of the Board of Governors of the NWMA. The Board Chairman shall have full voting privileges.

(b) RESPONSIBILITIES OF THE BOARD--

(1) The Board shall convene at a minimum of every calendar quarter, not to exceed a period of 90 consecutive days, and at a Board approved location within the United States;

(2) The Board shall establish and approve salaries and bonuses, with such salaries not limited by current Federal executive pay schedules, for the agency's executives, with the maximum annual salary, excluding bonuses, of the Executive Director not to exceed \$360,000 per annum for the first year with annual cost of living increases

permitted thereafter. The annual salary for each program director immediately below the position of Executive Director shall not exceed \$300,000 for the first year, excluding bonuses, with annual cost of living increases permitted thereafter. The Board shall also establish and approve travel and per diem payments for members of the Board while performing in an official Board capacity;

- (3) The Board shall establish and approve agency policies and procedures consistent with Federal personnel management policies and regulations and with all pertinent nuclear industry regulations, including Title 10 of the Code of Federal Regulations - Energy, Parts 0 to 199; Title 40 of the Code of Federal Regulations - Environment, Parts 190, 191, 194 and 197; and Title 49 of the Code of Federal Regulations - Transportation, Parts 171, 172 and 173;
- (4) The Board shall establish fees for providing radioactive waste management and environmental restoration services performed by the NWMA, and shall approve all activities proposed by the Executive Director to be necessary to support the pertinent Federal, State and local government, academic, medical, nuclear power industry and all other public and private programs desirous of radioactive waste support services, including low-level radioactive waste supplementary segregation, treatment and burial or monitored/retrievable storage services.

(c) RESPONSIBILITIES OF THE EXECUTIVE DIRECTOR--

(1) The Executive Director shall be responsible for the overall operation of the day-to-day activities of the NWMA, and shall have the authority to establish desired performance goals and management standards for the NWMA;

(2) The Executive Director shall, within 120 days of confirmation, present a DOE assets transition plan and organization chart to the Board for its approval, with all desired DOE assets to be transferred to the NWMA in a timely manner commencing 60 days from the date of the Board's presentation of its approval to Congress or as otherwise directed by Congress, with the date of completion of the transfer of all desired assets to be jointly established by Congress and the President;

(3) With the realization that knowledgeable, efficient and enthusiastic employees are the most valuable asset of any organization, the Executive Director is empowered to devise and implement an effective training program that will enable all employees to perform their duties safely and efficiently, and that will encourage employees to excel in their respective fields of endeavor and their careers; to devise and implement a performance appraisal program that will ensure fairness, thoroughness and honesty in the review of each employee's performance; to devise and implement a promotion system that ensures fairness based on the strict adherence to Federal merit promotion principles; to devise and implement a realistic employee awards and recognition program to recognize employees who are truly deserving of such recognition; and to devise and implement a program for ensuring accountability at all levels, especially at

the management levels in order to maintain an optimum degree of professionalism throughout the NWMA;

(4) The Executive Director shall have the authority to maintain, modify or cancel any existing contracts with contract holders providing services on previously owned DOE facilities that have been transferred to the NWMA. Further, the Executive Director shall have the authority to impose fines against and/or cancel contract payments to contract holders if their performance does not adhere to acceptable standards as established by the NWMA, including failing to meet expectations for the timely and cost effective completion of contracted services;

(5) The Executive Director shall submit an annual report, as approved by the Board, to Congress on the status of all pertinent activities of the NWMA, including projected and actual completion dates of key activities.

(d) RESPONSIBILITIES OF THE SECRETARY-- (1) upon the establishment of the NWMA and within a time frame jointly specified by Congress and the President, the Secretary shall ensure the completion of the transfer to the NWMA the control of the Yucca Mountain Project, the Waste Isolation Pilot Plant (hereafter referred to as WIPP), and any other DOE owned facilities deemed necessary by the Executive Director to enable the NWMA to fulfill its congressionally mandated activities. The transfers shall also include DOE staff currently employed at those facilities, based upon the review of their respective qualifications by, and the approval of, the Executive Director. Any DOE employees not transferring to the NWMA will be promptly reassigned by the Secretary to other duties within the DOE;

(2) Within the same time frame the Secretary shall transfer to the NWMA all existing contracts, and all pertinent funds previously budgeted, to support the projects and facilities that are transferred to the NWMA.

(e) RESPONSIBILITIES OF CONGRESS -- (1) Congress shall exercise greater flexibility in the disbursement of the Nuclear Waste Fund (hereafter referred to as the NWF) to enable the NWMA to meet projected completion dates on projects intended to be funded by the NWF, as deemed essential by the Board, and with the approval of Congress;

(2) Congress shall authorize the NWMA to establish and collect fees for providing low-level radioactive waste receipt, supplementary segregation, treatment and burial or monitored/retrievable storage services, performing environmental restoration services, and other pertinent support activities as deemed essential by the Board;

(3) Congress shall authorize the NWMA to construct an interim, centralized SNF storage facility on or near the Yucca Mountain Geologic Repository site or on other Federal or Tribal lands, with the concurrence of the Department of the Interior, with the interim storage facility to be operational by a date specified by Congress;

(4) Congress shall authorize the NWMA, upon transfer of the WIPP site, to commence the licensing activities for commercial low-level radioactive waste receipt, supplementary segregation, treatment and burial or monitored/retrievable storage at the WIPP, with the site to be fully licensed, operational and receiving shipments of low-level radioactive waste consisting of Classes A, B, C and greater than C, up to and including Highway Route Controlled Quantities (as defined by U.S. Department of Transportation regulations), not later than three years from the date of the transfer of the WIPP site;

(5) Congress shall authorize the NWMA, with the concurrence of the Department of the Interior, to select other Federal or Tribal lands to serve as low-level radioactive waste receipt, supplementary segregation, treatment and burial or monitored/retrievable storage sites, and to pursue licensing and construction activities as deemed necessary by the Board.

TITLE II -- SUPPORT FOR SPENT NUCLEAR FUEL REPROCESSING

SEC. 201. GENERAL PROVISIONS AND PROGRAM SCHEDULES.

(a) RESPONSIBILITIES OF CONGRESS --

- (1) With the acknowledgement by Congress that SNF is in effect a renewable energy source, Congress shall authorize the NWMA to pursue the study of SNF reprocessing for the purposes of significantly reducing the total volume of radioactive waste to be stored in the Yucca Mountain Geologic Repository, with the emphasis being placed on determining the most cost effective method(s) while ensuring the utmost in proliferation-resistant technologies. This activity is essential in order to ensure sufficient supplies of new nuclear fuel are available to support the projected growth in our nation's base load electric generating capacity for nuclear power plants, especially if SNF reprocessing becomes inevitable based on dwindling domestic supplies of natural, unprocessed uranium and the potential for our inability to obtain sufficient supplies of natural, unprocessed uranium from foreign suppliers due to national security issues or an increase in the demand for nuclear fuel in the host countries or regions that may cause the foreign suppliers to significantly reduce the amount of uranium for export in order to meet their national or regional needs. Further, Congress authorizes the NWMA, to utilize Federal lands in and around the Yucca Mountain Geologic Repository site or on other Federal or Tribal lands, with the concurrence of the Department of the Interior, to license, construct and operate SNF reprocessing facilities, utilizing proliferation-resistant technologies, if the Federally-owned facilities are deemed essential to ensuring sufficient supplies of new nuclear fuel are available to meet and sustain critical national energy demands or other national security needs, and commercial suppliers are not capable of meeting those needs;
- (2) Since there are conflicting views in the scientific community regarding the benefits of existing versus advanced SNF reprocessing technologies for meeting proliferation-resistant standards desired by the Global Nuclear Energy Partnership, Congress shall allocate annual funds from sources other than the NWF to be used by the NWMA to

develop the safest, most cost effective method(s) of reprocessing SNF to meet desired proliferation-resistant standards, with the annual fund allocation amount not to exceed \$250 million or a lesser amount as prescribed by Congress;

- (3) Congress shall also authorize the NWMA to negotiate with commercial suppliers of nuclear fuel to incorporate proliferation-resistant SNF reprocessing into their nuclear fuel manufacturing process, and to have a national SNF reprocessing capability in place by a date to be determined by Congress once such a program is proven to be economically feasible based on market costs for uranium, with the knowledge that there may be finite global quantities of natural, unprocessed uranium available to meet increasing demands for nuclear fuel.

Passed the Senate/House

(Date).

Attest: Secretary.

END